Location ID: <u>BLM-2-482</u> Field Representative(s): <u>Cooper/Kaszuba</u>
Northing: <u>225654.81</u> Easting: <u>402994.10</u>
Date Started: 11 October 1987 Date Completed: 7 December 1987
Drilling Method: <u>Air-foam rotary</u> Drilling Contractor: <u>Larjon</u>
Driller: <u>Jim Gower</u>
Total Depth Borehole: 550' Total Depth Well Casing: 497'
Total Depth Surface Casing: 100'
Diameter Well Casing: 4" Diameter Surface Casing: 10"
Length of Bottom Blank: <u>5'</u>
Type of Screen: <u>extra strength</u> 0.02 slot
Screen Interval: <u>482.4'</u> to <u>492.8'</u>
Water First Detected: <u>ND</u> Water Level Open Borehole: <u>462.7'(G.L.)</u>
Water Level Cased Borehole: <u>465'</u>
Quik-Foam Use:
Estimated Water Use:

Well Casing:

4in x 3ft SCD 40 PVC: 4in x 5ft SCD 40 PVC: 4in x 10ft SCD 40 PVC: 4in x 20ft SCD 40 PVC: Total SCD 40 PVC pipe:	ft	stock SS centralizers: custom SS centralizers: 1 4"x2' SS locking riser: 1 4" SS locking cap: 1 4" SS female cap: 1
4in x 3ft SCD 5 SS pipe: 4in x 5ft SCD 5 SS pipe: 1 4in x 10ft SCD 5 SS pipe: 2 4in x 20ft SCD 5 SS pipe: 18 Total SCD 5 SS pipe: 385	ft	<pre>4in x 5ft SCD 10 SS pipe: 1 4in x 10ft SCD 10 SS pipe: 10 4in x 20ft SCD 10 SS pipe: Total SCD 10 SS pipe: 105 ft</pre>

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Well Completion:

 100# bags 16/40 sand:
 10 bags

 100# bags 10/20 sand:
 bags

 100# bags 8/14 sand:
 2.5 bags

 100# bags 8/20 sand:
 6 bags

94# bags cement: 120 bags

5 gal. buckets bentonite: 2 buckets

50# bentonite powder: 12 bags

Surface Casing:

94# bags cement: 0 bags

50# bags bentonite powder: 0 bags

Pertinent Field Notes:

Previous well names: BLM 6-3, BLM-2-482.4

10/10/87	Larjon cuts road to site and 80'x80' pad, problems with dozer,
	completed mud pit, mobilize to site Cooper
10/11/87	Spud well with 12" bit, drill 100', set 10"x100' steel surface
	casing Cooper
10/12/87	Drill from 100' to 330' Cooper
10/13/87	Drill from 330'-430', bit clogs at 370' and tripped in and out to
	unclog, build fence around mud pit Cooper
10/14/87	Lost M-scope wire down hole (750') wire, bring in pulling unit
	and fish out wire, core 430'-440', plastic core barrel collapsed,
	only a few cobbles recovered, orientation questionable, ream
	430'-440', drill to 480' with distinct color change in fluid
	returns (purplish), drill to 490' Kaszuba, Cooper
10/15/87	Bail well and collect sample, core 490'-500', recover 3.7'
	between 490'-500', ream 490'-500', drill to 550', bit plugged and
	lost 15' to slough, hole seems to be caving quite a bit when
	attempting to clean it with thicker foam and air, bit clogged
	again during pressure release from bit Kaszuba
10/16/87	Remove equipment from site to JP-1. Geophysical logging by Akins
, ,	of S.W. Surveys.
10/17/87	Water level 461.9' Kaszuba
11/10/87	Bailed borehole clean to 527'
11/18/87	Steam clean equipment and casing for completion, move equipment

and sand to well site, run 420' tremie

11/19/87	Install backfill sand 16/40 and bentonite plug, run casing and gravel pack around screen, 502.9' casing, screen at 482.4'-492.8' extra strength Cooper, Kaszuba
11/20/87	Problems finishing with 8/20 sand gravel pack, probe sticks, add 8/14 sand by accident, sand still not up to 477.5' Cooper
11/21/87	Completion zone finished, upper bentonite plug installed, sand added to above static, mobilize to JP-1 Cooper, Kaszuba
11/25/87	Grout well to 20' below ground level Kaszuba
11/30/87	Bail 104.5 gallons, final sample extremely turbid Kaszuba
12/1/87	Bail 154 gallons, water sand free but cloudy Kaszuba
12/5/87	Water level 465', set pump at 493' Cooper
12/6/87	Pump 1300 gallons, clear after 50 gallons pumped, pump rate 13
	gallons/minute, stabilize pH and conductivity, move equipment to JP-1 Cooper
12/7/87	Finish grouting and set brass cap